



SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

- (A) NAME: NESTEC S.A
- (B) STREET: AVENUE NESTLE 55,
- (C) CITY: VEVEY
- (D) STATE OR PROVINCE: VAUD
- (E) COUNTRY: SWITZERLAND
- (F) POST CODE: 1800
- (G) TELEPHONE: 021 924 26 09
- (H) FAX: 021 924 28 80

(ii) TITLE OF THE INVENTION: COFFEE MANNANASE

(iii) NUMBER OF SEQUENCES: 7

(iv) COMPUTER READABLE FORM

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1613 base pairs
- (B) TYPE: nucleotide
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TTCATTAAAA ATGGCCTTCT CCAGGAGAAG CAATATCAGC AACTTCTCTT GCTGCTTCCT	60
TGTGATCATC GTCTTATCCC TGCATTGCGA AAATCATATA GTTTCTTCTT CTGCTTCGCG	120
CTTTATTCAA ACAAGAGGAA CCCGATTTCGT GTTAGGTGGC TACCCATTTT TTTTCAATGG	180
GTTCAACTCC TACTGGATGA TGCATGTTGC AGCTGAGCCA AGTGAAAGGC ATAAAATTTT	240
CAATGTATTT CGCGAGGCTG CTGCTACAGG GCTTACTGTT TGCCGGACAT GGGCATTTCAG	300
CGATGGTGGC GATCGAGCTC TTCAAATGTC CCCCCGAGTC TATGATGAAC GTGTCTTTCA	360

GGCCCTTGAT	TTTGTGGTAT	CGGAAGCAAG	GAAGTATGGA	GTTCACTTAA	TCCTGAGTCT	420
GACCAACAAC	TACAAGGACT	TTGGAGGAAG	GACGCAATAC	GTGACGTGGG	CTAAAAATGC	480
CGGAGTACAA	GTGAATAGCG	ATGATGATTT	TTACACCAAG	AATGCTGTCA	AGGGATATTA	540
CAAGAATCAC	ATTAAGAAAAG	TGTTGACTAG	GATCAACACA	ATCAGTAGAG	TTGCATATAA	600
AGATGATCCA	ACAGTCATGG	CATGGGAGCT	AATAAATGAA	CCTCGTIGCC	AGGTCGACTT	660
CTCCGGAAAA	ACCTTAAATG	CTTGGGTTCA	AGAAATGGCA	ACTTACGTCA	AATCACTCGA	720
TAACAAACAC	CTTCTAGAAA	TAGGCATGGA	GGGATTCTAC	GGAGATTCAA	TGCCAGGCAA	780
AAAGCAGTAC	AATCCTGGAT	ACCAAGTGGG	CACAGATTTT	ATCACCAATA	ATCTTATCAA	840
AGAGATAGAT	TTTGCAACCA	TTCATGCATA	TCCCGATATT	TGGCTGTCTG	GACAGAGCGA	900
CGGTGCACAG	ATGATGTTCA	TGAGAAGGTG	GATGACCAGT	CACTCCACAG	ACTCTAAGAC	960
CATACTTAAA	AAACCATTGG	TTCTCGCTGA	ATTTGGGAAA	TCAAGTAAAG	ATCCAGGATA	1020
CAGTTTATAT	GCCAGGGAGT	CATTCATGGC	CGCAATTTAC	GGTGATATCT	ACAGGTTTGC	1080
TAGAAGAGGA	GGCATTGCAG	GTGGATTGGT	TTGGCAAATC	CTGGCCGAGG	GAATGCAACC	1140
GTACGCAGAT	GGGTATGAAA	TTGTCTTGTC	TCAGAACCCA	TCAACCGGAC	GAATCATAAG	1200
CCAACAGTCT	CGACAAATGA	CTTCACTCGA	CCATATGAGC	AGTAATAGAA	CCAATTCTCA	1260
AAGCAACAAA	CTGCGCAATT	CAAAGGAGCA	GTGATCAGTC	TTCCAGAAAG	TCTACTTGAG	1320
TTTGTTTCGTA	TGTCAAAATC	AAGTATCAAC	CATAGAAATT	TCCATTATAT	TCGGAGTGTT	1380
TTAGTCAAGT	TCTAGTAATA	CCGCTGGAGT	CATGATAGTT	ATGACAGTAA	TACCGCTGGA	1440
GTCAAGTTCT	AGTAATACCG	TTGGAGTCAA	GTTATGATAG	TTATTTAAAA	ATTAGTATTT	1500
TATTACAAAT	TTGTTATTGT	TGTGAGACTT	GTTTATTAAG	TAAATGGAAA	GTCTTATCAT	1560
TATTATCATT	TGAGAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA	AAA	1613

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: [lacuna]
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Met	Ala	Phe	Ser	Arg	Arg	Ser	Asn	Ile	Ser	Asn	Phe	Ser	Cys	Cys	Phe
1					5				10					15	
Leu	Val	Ile	Ile	Val	Leu	Ser	Leu	His	Cys	Glu	Asn	His	Ile	Val	Ser
				20				25					30		
Ser	Ser	Ala	Ser	Arg	Phe	Ile	Gln	Thr	Arg	Gly	Thr	Arg	Phe	Val	Leu
				35				40					45		

Tyr Ser Leu Tyr Ala Arg Glu Ser Phe Met Ala Ala Ile Tyr Gly Asp
 340 345 350
 Ile Tyr Arg Phe Ala Arg Arg Gly Gly Ile Ala Gly Gly Leu Val Trp
 355 360 365
 Gln Ile Leu Ala Glu Gly Met Gln Pro Tyr Ala Asp Gly Tyr Glu Ile
 370 375 380
 Val Leu Ser Gln Asn Pro Ser Thr Gly Arg Ile Ile Ser Gln Gln Ser
 385 390 395 400
 Arg Gln Met Thr Ser Leu Asp His Met Ser Ser Asn Arg Thr Asn Ser
 405 410 415
 Gln Ser Asn Lys Leu Arg Asn Ser Lys Glu Gln
 420 425

(2) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs
 - (B) TYPE: nucleotide
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
 - (A) DESCRIPTION: /desc = "SYNTHETIC OLIGONUCLEOTIDE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

GGNATGGARG GNTTYTAYGG

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(2) INFORMATION FOR SEQ ID NO: 4:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 15 base pairs
 - (B) TYPE: nucleotide
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
 - (A) DESCRIPTION: /desc = "SYNTHETIC OLIGONUCLEOTIDE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

TTTTTTTTTT TTTT

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(2) INFORMATION FOR SEQ ID NO: 5:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 17 base pairs
 - (B) TYPE: nucleotide
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
 - (A) DESCRIPTION: /desc - "SYNTHETIC NUCLEOTIDE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

AAATCTGTGC CCACTTG

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(2) INFORMATION FOR SEQ ID NO: 6:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 17 base pairs
 - (B) TYPE: nucleotide
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
 - (A) DESCRIPTION: /desc - "SYNTHETIC NUCLEOTIDE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

GTAAAACGAC GGCCAGT

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(2) INFORMATION FOR SEQ ID NO: 7:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 17 base pairs
 - (B) TYPE: nucleotide
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: other nucleic acid
 - (A) DESCRIPTION: /desc - "SYNTHETIC NUCLEOTIDE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

CAGGAAACAG CTATGAC

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(2) INFORMATION FOR SEQ ID NO: 8:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: [lacuna]
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

Ser	Phe	Asn	Phe	Val	Lys	Thr	Arg	Gly	Thr	Glu	Phe	Val	Met	Asp	Xaa
1				5					10					15	
Arg	Phe	Leu	Tyr	Leu											
					20										

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: [lacuna]
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

Thr	Trp	Ala	Phe	Ser	Asp	Gly	Gly	Tyr	Arg
1				5				10	

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 17 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: [lacuna]
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

Glu	Tyr	Asn	Pro	Gly	Tyr	Gln	Val	Gly	Thr	Asp	Phe	Ile	Ser	Asn	Asn
1				5				10						15	

Arg

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 36 base pairs
- (B) TYPE: nucleotide
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc - "SYNTHETIC NUCLEOTIDE"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

GTCTTATCCC TGGATCCCGA AAATCATATA GTTCT

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(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 40 base pairs
- (B) TYPE: nucleotide
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc - "SYNTHETIC NUCLEOTIDE"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

GTACTCTGCA GACTTTCTGG AAGACTGATC ACTGCTCCTT

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